

REMARKS

Applicants appreciate the thorough examination and detailed explanations of the rejections by the Examiner as reflected in the Official Action of March 3, 2008 (hereinafter, "the Official Action"). Applicants, however, will now demonstrate that Claims 18-28 are directed to statutory subject matter and thus are patentable under 35 U.S.C. § 101, and further that Claims 1-30 are patentable over Weigel et al., "Applying GIS and OR Techniques to Solve Sears Technician-Dispatching and Home-Delivery Problems," Institute for Operations Research and the Management Sciences, 0092-2102/99/2901/0112, 1999 ("Weigel"). Accordingly, Applicants respectfully request the withdrawal of all rejections and the allowance of all claims for at least the reasons described herein.

Examiner Interview Summary and Claim Amendments

Applicants appreciate the courtesies that were extended to the undersigned by Examiners Mansfield and Boyce during a telephone interview on May 22, 2008. Applicants' representatives Bruce Owens and Mitch Bigel presented remarks regarding distinctions between the independent claims and the Weigel reference. During the interview, the arguments made below were presented to the Examiners. Although stating that another review of Weigel was warranted, Examiners Mansfield and Boyce indicated that Claim 1 should be amended to specify that the evaluation of the service technician's performance is based on efficiency metrics, and further indicated with respect to the 35 U.S.C. § 101 rejection of Claims 18-28 that Claim 18 should be amended to associate the module with a physical computer system. The above constitutes an accurate summary of the substance of the telephone interview between the Examiners and the undersigned on May 22, 2008, pursuant to MPEP §713.04.

Applicants have amended Claims 1 and 18 to incorporate the amendments discussed with the Examiners. Support for the amendment to Claim 1 may be found, for example, at paragraphs [0047] to [0056] of the present application; the amendment to Claim 18 is likewise supported by paragraphs [0024] to [0027] of the present application.

Claims 18-28 Are Directed to Statutory Subject Matter under 35 U.S.C. § 101

Independent Claim 18, as amended, recites "a computer system for evaluating performance of a service technician who performs multiple service dispatches, comprising: a

hardware module that is configured to compare a service technician's actual times to perform a series of tasks that comprise a dispatch, to planned times for the series of tasks." In the Official Action, the Examiner rejects Claim 18 and its dependent Claims 19-28 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Examiner contends that "Claim 18 is directed to a module (i.e., software per se)," and further that "[s]oftware per se is not within one of the four statutory classes and thus is rejected under 35 U.S.C. 101." Official Action, page 2.

As noted above, Claim 18 was amended to recite "a hardware module" per the suggestion of Examiners Mansfield and Boyce during the interview of May 22, 2008. Applicants respectfully submit that this amendment has obviated the rejection of Claim 18 under § 101, and that Claims 18-28 are now directed to statutory subject matter and should be passed to issuance.

Claims 1-30 Are Patentable Over Weigel

Claims 1-30 of the present application stand rejected under 35 U.S.C. § 102(b) as being anticipated by Weigel. Applicants respectfully submit to the contrary that Weigel does not disclose or suggest all elements of the pending claims, and thus that Claims 1-30 are patentable as written. A detailed claim analysis is provided below.

To summarize, Weigel discusses the development and implementation of a vehicle routing and scheduling system for dispatching service technicians and scheduling deliveries. Weigel describes the system as modeling "vehicle-routing problems with time windows" and applying various algorithms and heuristics first to assign service orders or deliveries to service technicians or drivers, respectively, and then to generate and optimize the delivery sequences and assigned routes. Weigel, pages 117-118. Importantly, Weigel describes the system as operating only to prospectively plan and assign routes and stops. Nowhere does Weigel disclose or suggest any capability of the system to monitor the actual time spent by a technician to perform a task, compare the actual time for a task to the planned time for the task, compare the number of dispatches completed in a day to the total number of dispatches for the day, or provide a retroactive evaluation of the performance of a technician by making such comparisons, as recited by the claims of the present application.

Accordingly, Applicants respectfully submit that Weigel does not anticipate Claims 1-30 of the present application. A detailed traversal of the rejection of the pending claims is

provided below. For the Examiner's convenience, this traversal will be presented in the order in which the claims were rejected in Paragraphs 3 through 15 at pages 3-6 of the Official Action.

A. Claims 1, 11, 18, 25, 29, and 30 Are Patentable Over Weigel

Claim 1 of the present application recites, in part, "comparing, in a computer system, a service technician's actual times to perform the series of tasks to the planned times for the series of tasks." These recitations of Claim 1 are exemplary of corresponding recitations of Claims 11, 18, and 29.

The Official Action asserts that Weigel at page 117 describes "stop times" that correspond to the "service technician's actual times" recited by Claims 1, 11, 18, and 29. Official Action, page 3. Applicants first respectfully note that the term "stop times" is not used by Weigel, and thus Applicants are unsure as to the precise meaning of the Examiner's term. Applicants further respectfully note that the cited portion of Weigel describes the process of generating and optimizing delivery routes; consequently, all of the times discussed by Weigel in the portion cited by the Examiner relate only to prospective (forward-looking) calculations of routes and schedules, not retrospective (backward-looking) comparisons of a technician's performance to planned times. As noted above, Weigel nowhere discloses or suggests measuring the actual amount of time spent by a technician to perform a task or series of tasks, nor does Weigel disclose or suggest comparing the actual time to the planned time for the task or series of tasks. Applicants thus respectfully request withdrawal of the outstanding rejections of Claims 1, 11, 18, and 29, and of the claims depending therefrom.

Moreover, Claim 1, as amended, further recites "generating, in the computer system, an evaluation of the service technician's performance efficiency based upon the comparing." These recitations of Claim 1 are exemplary of corresponding recitations of Claims 25 and 30.

In the Official Action, the Examiner contends that the "evaluation of the service technician's performance" recitation of Claim 1 is satisfied by the "stop report" described by Weigel on at least page 117. Official Action, page 3. Applicants respectfully submit, however, that Weigel provides no support for the Examiner's conclusion. On page 116, Weigel describes a "stop report" as follows:

The reporting module generates on-line and hard-copy reports, for example, ... a stop report containing information about individual stops, such as the route number, the visiting sequence number, the service or

delivery order number, the time window imposed, the estimated arrival time, the service time, the transit time from the previous stop, and the parts needed.

The "reporting module" that generates the stop report is part of a system whose purpose is to generate, optimize, and assign delivery routes. Weigel, page 116. From the context, then, it is apparent that the stop report itself merely contains information about the individual stops that are planned as part of a route to be followed by a service technician. The stop report, in other words, is a prospective report, not a retrospective evaluation of a technician's performance efficiency. Moreover, Weigel neither discloses nor suggests that the "stop reports" comprise evaluations of the performance efficiency of service technicians by comparing actual times to planned times.

For at least the foregoing reasons, Applicants respectfully submit that independent Claims 1, 11, 18, and 29 are patentable over Weigel. Applicants further respectfully submit that the claims depending from Claims 1, 11, 18, and 29 are patentable over Weigel for at least the same reasons discussed above with respect to the patentability of Claims 1, 11, 18, and 29.

B. Claims 3, 13, and 20 Are Independently Patentable Over Weigel

Claim 3 depends from Claim 2, and additionally recites "wherein actual times for driving to the customer premises and driving from the customer premises are determined based on data that is generated from a vehicle that is driven by the service technician" (emphasis added). These recitations of Claim 3 are exemplary of corresponding recitations of Claims 13 and 20.

The Examiner states on page 4 of the Official Action that the "ARC/INFO GIS" component discussed by Weigel on at least pages 115-116 is "data...generated from a vehicle that is driven by the service technician." Applicants respectfully submit that this assertion is not supported by the cited portion of Weigel. According to Weigel, ARC/INFO is a geographic information system (GIS) that "integrates Sears customer data and commercially available street network data." Weigel, page 115. Nowhere does Weigel disclose or suggest that the data contained in the ARC/INFO GIS is comprised of or includes "data that is generated from a vehicle that is driven by the service technician," as recited by the above-quoted portion of Claim 3.

Accordingly, Applicants respectfully submit that dependent Claims 3, 13 and 20 are independently patentable for at least the foregoing reasons.

C. Claims 7 and 26 Are Independently Patentable Over Weigel

Claim 7, which depends from Claim 1, further recites "where the generating an evaluation comprises generating a comparison of total actual time worked in a day, compared to total planned time for the day, based on service dispatches for the day." Claim 26, which depends from Claim 25, includes corresponding recitations.

The Official Action on page 5 appears to equate the "evaluation" of Claims 7 and 26 to the "route report" discussed by Weigel on at least page 116. Applicants respectfully note that on page 116, Weigel describes a "route report" as "containing such information as the route number, technician's or driver's name and identification number, the number of stops, starting time and transit time, total mileage, total service time, and overtime." Weigel, page 116. The route report is generated by the same reporting module as the stop report discussed above. Accordingly, as with the stop report, Weigel's route report appears to be a prospective report – in this case, a description of a planned route that is produced as part of the route generation process. Weigel does not disclose or suggest that the route report comprises a retrospective evaluation of a technician, or that the route report compares total actual time worked in a day by the technician to the planned total work time for the day.

For at least these reasons, Applicants respectfully submit that Claims 7 and 26 are independently patentable over Weigel, and request withdrawal of the outstanding rejections.

D. Claims 8 and 27 Are Independently Patentable Over Weigel

Claim 8 depends from Claim 7 and additionally recites "generating, in the computer system, a comparison of total number of demand service dispatches completed in a day, compared to total number of demand service dispatches for the day." These recitations of Claim 8 are exemplary of corresponding recitations of Claim 27.

The Examiner concludes on page 5 of the Official Action that the "routing-summary report" described by Weigel satisfies the above-quoted recitations of Claim 8. Applicants respectfully note that, as with the stop report and the route report discussed above, Weigel appears to describe the "routing-summary report" as a prospective report generated as part of the route planning process. According to Weigel, the routing-summary report is generated

by the reporting module and contains "information about an entire day's routes (number of routes, number of stops, total mileage, total travel time, total dead time including waiting and free times, average number of stops per route, and estimated cost)." Weigel, pages 116-117. Significantly, Weigel does not disclose or suggest that the routing-summary report includes information related to the total number of demand services completed in a day; thus, the routing-summary report described by Weigel would not be usable for comparison purposes.

Accordingly, Applicants respectfully submit that Claims 8 and 27 are independently patentable over Weigel for at least the foregoing reasons.

E. Claims 9 and 28 Are Independently Patentable Over Weigel

Claim 9, which depends from Claim 8, additionally recites "generating, in the computer system, an evaluation of the service technician's revision rate based upon a number of service dispatches that are not completed successfully on a first visit." These recitations of Claim 9 are exemplary of corresponding recitations of Claim 28.

The Examiner cites to pages 114 and 127 of Weigel in concluding that Weigel discloses the above-quoted recitations of Claim 9. However, Applicants respectfully submit that the portions of Weigel cited by the Examiner provide no support for the Examiner's conclusions. Page 114 of Weigel plainly states that Sears Product Services (SPS) "tries to plan the routes for services so that ... it maximizes the completion of service calls on first attempt" – *i.e.*, it is a prospective goal of SPS to maximize the completion of service calls on the first attempt. Page 114 of Weigel contains no disclosure or suggestion that the system described therein allows the retrospective evaluation of service technicians on the basis of the number of service calls not completed successfully on a first visit. Moreover, while page 127 of Weigel does describe the overall benefits achieved by the EHDS/CARS systems, there is no disclosure or suggestion of evaluating an individual service technician revision rate according to calls not completed successfully on a first visit.

For at least the foregoing reasons, Applicants respectfully submit that Claims 9 and 28 are independently patentable over Weigel.

F. Claim 10 Is Independently Patentable Over Weigel

Dependent Claim 10 depends from Claim 1 and additionally recites the following:

wherein the comparing comprises comparing the service technician's actual times to perform the series of tasks in a given day to the planned times for the series of tasks; and

wherein the generating comprises generating an evaluation of the service technician's performance for the given day based upon the comparing;

the method further comprising providing the evaluation to a supervisor of the service technician at a beginning of a business day that immediately follows the given day.

In support of the rejection, the Examiner cites generally to pages 116-118 of Weigel. Applicants respectfully note, however, that the cited portion of Weigel does not appear to contain any disclosure or suggestion of the above-quoted recitations of Claim 10. Weigel on pages 116 to 118 describes the various modules comprising the route-generation system, the route optimization techniques used by the system's algorithms, and the process of constructing an origin and destination matrix. No disclosure or suggestion is made of comparing times, evaluating a technician's performance based on such comparisons, or providing the evaluation to a supervisor, as recited by Claim 10.

Accordingly, Applicants respectfully submit that dependent Claim 10 is independently patentable over Weigel for at least the foregoing reasons.

G. Claims 17 and 24 Are Independently Patentable Over Weigel

Claim 17, which depends from Claim 11, further recites "wherein the comparing is performed daily based on the service technician's actual times to perform series of tasks for a previous business day." These recitations of Claim 17 are exemplary of corresponding recitations of Claim 24.

The Examiner cites to page 127 of Weigel in concluding that Weigel discloses the above-quoted recitations of Claims 17 and 24. Applicants respectfully note that Weigel on page 127 describes the overall achievements of the EHDS and CARS systems by comparing performance statistics from a time period before the systems were implemented to statistics gathered after implementation. While Weigel does note that one effect of the implementation of the CARS system was that "it increased the number of service orders each technician completed per day by three percent" (emphasis added), Weigel nowhere discloses or suggests a comparison based on a service technician's actual times to perform a task or series of tasks for a previous business day.

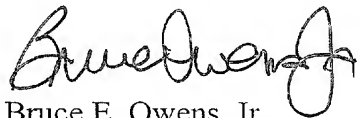
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Accordingly, Applicants respectfully submit that Claims 17 and 24 are independently patentable over Weigel for at least the foregoing reasons.

Conclusion

Applicants again appreciate the thorough examination by the Examiner. Applicants also appreciate the courtesies accorded by Examiners Mansfield and Boyce during the telephone interview. Applicants have now demonstrated, however, that Claims 18-28 as amended are directed to statutory subject matter, and further demonstrated that Claims 1-30 as amended are patentable over Weigel. Accordingly, Applicants respectfully request withdrawal of the outstanding rejections and allowance of the present application.

Respectfully submitted,



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